



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/500,823	02/10/2000	Oren Marmur	Marmur=2	3103
1444	7590	12/13/2004	EXAMINER	
BROWDY AND NEIMARK, P.L.L.C. 624 NINTH STREET, NW SUITE 300 WASHINGTON, DC 20001-5303			PAYNE, DAVID C	
			ART UNIT	PAPER NUMBER
			2633	

DATE MAILED: 12/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/500,823

Applicant(s)

MARMUR, OREN

Examiner

David C. Payne

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-4, 6, 8 and 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-4, 6, 8 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 September 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 18/ 7/1/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 2633

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-4, 6, 8 and 10 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

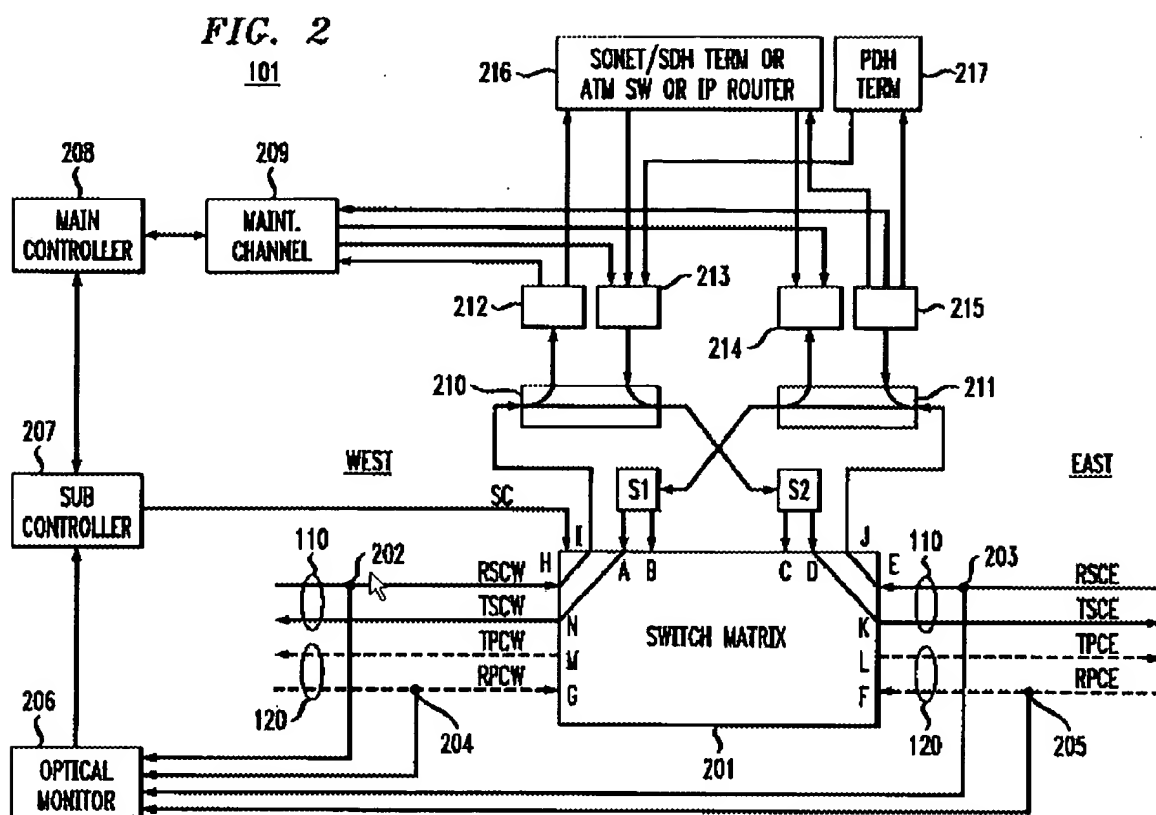
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 2-4, 6, and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Al-Salameh US 6,262,820 B1 (Al-Salameh).

Art Unit: 2633



Re claim 2,

A method for routing traffic to a protection channel in an optical communication network which comprises a plurality of telecommunication channels extending between first (e.g., 1101 of Figure 11) and second locations (e.g., 1104 of Figure 11), the telecommunication channels comprising a plurality of channels (*TSCW*, *TSCE* of Figure 2) for carrying traffic in normal operation mode from the first location to the second location and at least one protection channel (*TPCW*, *TPCE* of Figure 2) for carrying traffic in the event of a fault in at least one of the channels carrying traffic in normal operation mode, which method comprises the steps of: detecting a fault on at least one of the channels carrying traffic in normal operation mode, at the second location (e.g., col./line: 2/25-45); switching at the second location the transmission and reception paths associated with said at least one

Art Unit: 2633

failing channel to the at least one protection channel (*e.g., col./line: 10/23-35*); detecting a fault on said at least one channel at the first location; and switching at the first location the transmission and reception paths associated with said at least one faulty channel to the at least one protection channel (*e.g., col./line: 10/23-35*).

Re claim 3,

A method wherein said at least one protection channel is used for protecting at least one pre-designated channel out of the plurality of telecommunication channels (*e.g., col./line: 4/35-45; 6/20-30*).

Re claim 4,

A method wherein said at least one protection channel is used for protecting a plurality of telecommunication channels (*e.g., col./line: 4/35-45; 6/20-30*).

Re claim 6,

An optical communication system comprising a plurality of telecommunication channels extending between first (*e.g., 1101 of Figure 11*) and second locations (*e.g., 1104 of Figure 11*), the channels comprising a plurality of forward channels for carrying traffic in normal operating mode from the first location to the second location (*TSCW, TSCE of Figure 2*), at least one protection link for carrying the traffic of at least one of said forward channels in the event of fault in said at least one forward channel (*TPCW, TPCE of Figure 2*), wherein in response to a detection of loss of signal in said at least one forward channel, traffic designated to be transmitted along said at least one forward channel is diverted to said at least one protection link at each of the first and second locations (*e.g., col./line: 2/25-45*),

Art Unit: 2633

independent of detecting a loss of signal at the other of said first and second locations
(*autonomously, e.g., col./line: 2/40-45*).

Re claim 8,

An optical communication system further comprising means adapted to monitor the operability of the protection link during normal operation mode of the system (*204, 205 of Figure 2, e.g., col./line: 4/63-67; 5/1-5*).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Al-Salameh US 6,262,820 B1 (Al-Salameh).

Re claim 1,

A method for diverting communication traffic in an optical communication network which comprises first optical transmission (*TSCW, TSCE of Figure 2*) and reception links (*RSCW, RSCE of Figure 2*) extending between a first location (*e.g., 1101 of Figure 11*) and a second location (*e.g., 1104 of Figure 11*) and carrying traffic in normal operation mode between the first location and the second location, and second transmission (*TPCW, TPCE of Figure 2*) and reception links (*RPCW, RPCE of Figure 2*) adapted to carry traffic diverted from the first

Art Unit: 2633

optical transmission and reception links in the event of a fault in at least one of the first optical transmission link and the first optical reception link, which method comprises the steps of:

determining whether an energy received over a first optical link at the second location exceeds a pre-defined threshold (*e.g.*, *col./line: 11/20-30*); in the case that the energy thus received does not exceed the pre-defined threshold, diverting the traffic transmission and reception at the second location to the corresponding second links (*e.g.*, *col./line: 2/25-45*); determining whether a energy received via a first optical link at the first location exceeds a predefined threshold (*e.g.*, *col./line: 11/20-30*); and in the case that the energy thus received at the first location does not exceed the pre-defined threshold, diverting the traffic transmission and reception at the first location to the corresponding second links (*e.g.*, *col./line: 2/25-45*).

Al-Salameh does not disclose that the energy received is a total of the energy received at either the first or second location. Rather Al-Salameh monitors a "small portion of optical energy (for example, less than 2%)", see *col./line: 4/63-65*. It would have been obvious to one of ordinary skill in the art at the time of invention to measure the total energy received rather than a portion (2%) of the total energy so that a LOS could be detected without using an amplifier to scale the tapped signal thereby simplifying the monitoring circuit shown in Figure 12 of Al-Salameh.

Re claim 10,

A method further comprising monitoring the operability of the protection link when said protection link is not used for transmission of traffic during normal operation mode (*204, 205 of Figure 2, e.g., col./line: 4/63-67; 5/1-5*).

Art Unit: 2633

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Payne whose telephone number is (571) 272-3024. The examiner can normally be reached on M-F, 7a-4p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dcp


David C. Payne
Patent Examiner
AU 2633